Excerpts from the Department's License Record

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Morrison
Environmental
Engineering

June 16, 2010

Mr. Marc Cone
Department of Environmental Protection
Bureau of Air Quality
17 State House Station
Augusta, Maine 04333-0017

Re: New Source Application
Berwick Iron & Metal Recycling, Inc.

Dear Mr. Cone:

On behalf of Berwick Iron & Metal Recycling, Inc. (BI&MR), Morrison Environmental Engineering, Inc. (MEE) is submitting an application for a new source air emission license. This application is being submitted in accordance with Department of Environmental Protection (DEP) Regulations, Chapter 115, "*Major and Minor Source Air Emission License Regulations.*" The application forms are included as Appendix A. Other required supporting documentation, including a United States Geological Survey Topographic Map, emission calculations, and public notice, are contained in the remaining appendices as detailed below.

Background

Berwick Iron & Metal Recycling, Inc. is a ferrous and non-ferrous metal recycling facility located on Route 236 in Berwick, Maine. Appendix B provides a United States Geological Survey (USGS) Topographic Map showing the facility location.

The facility is proposing to install and operate a metal shredder powered by a diesel engine rated at 3600 horsepower, to facilitate the recycling of cars and other large scrap items. The maximum rated fuel input for the diesel drive unit is 200 gallons per hour (GPH), which equates to 27.4 million British thermal units per hour (MMBtu/hr). The "hammer-mill" shredder will be used to process scrap metal to facilitate recycling. Large metal objects such as crushed cars will be processed to reduce the metal to a nominal six-inch size. The shredded metal will be divided into ferrous and non-ferrous components using a large eddy-current electromagnet. All ferrous and non-ferrous components, including aluminum, copper, plastic, and foam, will be sold for further processing.

The diesel engine is not subject to New Source Performance Standards under Title 40 of the Code of Federal Regulations Part 60 (40CFR60) Subpart IIII, "*Standards of Performance for Stationary Compression Ignition Internal Combustion Engines,*" as the unit was manufactured in 1967, and has not been reconstructed or modified as defined in that regulation.

The shredder is a "Texas Shredder" Model 8104 with an expected throughput of 50-100 tons per hour (TPH) depending on the type of material being processed. The shredder utilizes a

sophisticated computerized control system to maintain optimum engine loading and to minimize emissions.

The following tables summarize the facility's licensed equipment:

Emission Unit	Date of Construction	Maximum Design Capacity
SHREDDER		
Texas Shredder Model 8104	1988, controls updated 2006	50-100 TPH

Emission Unit	Date of Construction	Design Capacity	Maximum Firing Rate	Fuel Type (and % sulfur)
DIESEL ENGINE				
General Motors Model 20-645-E3	1967	27.4 MMBtu/hr	200 gal/hr	Diesel, 0.05%

Note: TPH – Tons per hour
MMBtu/hr – million British thermal units per hour
gal/hr – gallons per hour

BI&MR performs additional operations listed as "insignificant or trivial activities" pursuant to Chapter 115, Appendix B. These activities and/or equipment are not required to be listed in the application or to be licensed.

Best Available Control Technology (BACT)

For any new or modified emission unit, a facility is required to demonstrate that the unit to be constructed, reconstructed or modified will receive Best Available Control Technology (BACT). BACT is defined as an emission limitation based on the maximum degree of reduction for each pollutant emitted through the application of production processes or available methods, systems, and techniques taking into account energy, environmental, and economic impacts and other costs.

BI&MR proposes the following to meet the requirements of BACT:

Shredder

The potential emissions from the shredder consist of particulate matter (PM and PM10) generated from the physical impact of the shredder hammers on the materials, as well as from the potential heating of the material by the friction in the shredder. The shredder is equipped with water sprays, which will be utilized as needed to minimize visible emissions, thereby minimizing PM emissions. In addition, several new process controls are incorporated in this

shredder, to minimize process emissions and reduce energy usage, which will in turn reduce emissions from the diesel drive unit.

The controls for the shredder process include integrated hardware and software. The plant is equipped with an automatic system for controlling operations such as shredder feed rate, feed roll pressure, engine throttle position, etc. By monitoring relevant variables, these controls maximize drive motor performance and control the feed rate, resulting in increased production efficiency, improved product, increased nonferrous recovery, and reduced power cost per ton. This reduced energy consumption also means that the engine fuel use will be minimized and that the loading is more consistent, reducing the potential for surging and/or lugging, thereby minimizing visible PM emissions from the drive unit.

Another important development in this generation of shredder is an improved power coupling between the drive unit and the shredder. Previous shredders were most often direct-coupled to the drive units at a one to one ratio, which meant that the shredder speed and engine speed were the same in terms of revolutions per minute (RPMs). This resulted in an imperfect compromise between shredder speed and engine speed, with the shredder either running too fast, and/or the engine running too slow for optimum performance. This tended to increase the potential for excessive heating of the metal being processed, which resulted in higher PM emissions, and would also lead to excessive wear on the shredder itself. Also, if the diesel drive unit operates at too low a speed, it may not operate at full output torque, making the unit prone to excessive lugging which can cause elevated PM emissions. BI&MR's proposed shredder uses a simple reduction gear to ensure that the shredder and diesel drive unit both operate at their optimum RPM range to maximize usable torque and minimize emissions. The shredder mill is expected to operate at approximately 600 RPMs, while the engine operates at approximately 850-900 RPMs.

Diesel Drive Unit

A 3600 HP 20-cylinder turbocharged General-Motors Model 3410 diesel locomotive engine is proposed to be used to provide power for the shredder. The following is a summary of the control systems proposed to meet the requirements of BACT for this engine.

The unit will burn low sulfur diesel fuel, with a maximum sulfur content of 0.05%. BI&MR is proposing a fuel limit of 300,000 gallons per year, based on 150 GPH, 40 hours per week, and 50 weeks per year of operation. Fuel use will be tracked through purchase records. In the future, the diesel fuel may be directly piped from a nearby bulk fuel tank, which may also be used to fuel other portable or mobile equipment. In that case, the fuel used will be tracked by inventory, i.e.: subtracting the dispenser total from the purchase amounts.

BI&MR will ensure good combustion and maintenance practices for the proper operation of the diesel drive unit. The unit has been fitted with GM Ecotip fuel injectors, which are designed to improve the fuel input pattern and improve fuel efficiency. These injectors reduce visible emissions, PM, carbon monoxide (CO), and volatile organic compound (VOC) emissions significantly, compared to standard injectors. This improves the ability for retarding the timing in order to reduce NOx emissions.

Turbocharged engines use a turbine in the exhaust stream to power a separate compressor turbine in the air intake manifold. This increases the combustion air pressure, which improves engine performance. Unfortunately, a potential drawback with a standard turbocharger is that the adiabatic heating caused by compressing the combustion air can have the tendency to increase NOx emissions. The engine that BI&MR proposes to use was originally equipped with a two-pass aftercooler following the turbocharger, which cools the compressed air in the airbox. This cooling helps increase the density of the combustion air, which increases the density of the air entering the engine, further improving engine performance. BI&MR is proposing to replace the two-pass aftercooler with a four-pass aftercooler, which helps to decrease NOx formation by further decreasing the combustion air temperature. The four-pass aftercooler is manufactured by GM/Electro-Motive, which is the original equipment manufacturer (OEM) for this engine, ensuring that this retrofit is appropriate for this engine. The manufacturer has conducted testing showing that the four-pass aftercooler can reduce NOx emissions by 15% at full load, compared to the standard two-pass model.

The high power rating of the engine will help to prevent excessive engine lugging under load, which will help control visible emissions. Earlier shredders were often coupled with smaller engines, which could be bogged down during loading, potentially leading to concerns about visible emission. This proposed unit is expected to have sufficient power to operate more steadily, especially when used in conjunction with the automated controls described previously.

Emissions tables showing the potential emissions as well as the proposed controlled emissions are included in Appendix C. The proposed emissions are based on the United States Environmental Protection Agency (EPA) AP-42, "*Compilation of Air Pollutant Emission Factors, Volume I*", Table 3.4-1 for Large Stationary Diesels. The controlled NOx emissions values were based on the use of ignition timing retard. The combination of this control as well as the use of an annual fuel limit will control emissions to a level that additional add-on controls would not be economically feasible considering the type of facility and expected mode of operation.

Regulatory Standards

Maine Regulations

Chapter 101, *Visible Emissions Regulation*, establishes opacity standards for process operations and fuel burning equipment. Visible emissions from the shredder would be considered "fugitive emissions" according to Maine DEP regulations. Visible emissions from the shredder will need to meet a limit of 20 percent opacity, except for no more than five (5) minutes in any 1-hour period. Compliance will be determined by an aggregate of the individual 15-second opacity observations which may exceed 20 percent in any hour. Visible emissions from the diesel engine will be regulated as "stationary internal combustion units manufactured prior to calendar year 2000", and "shall not exceed an opacity of 30 percent on a six (6) minute block average basis, except for no more than two (2) six (6) minute block averages in a 3-hour period."

Chapter 103, *Fuel Burning Equipment Particulate Emission Standard*, establishes an emission standard for particulate matter based on the type of fuel fired and the date of installation. Chapter 103 requires the diesel drive unit to meet a particulate emissions limit of 0.12 lb/MMBtu.

Chapter 115, "*Major and Minor Source Air Emission License Regulations,*" implements new source review and licensing requirements for facilities that have the potential to emit regulated pollutants at a level defined as a major or minor source. BI&MR is requesting a minor source license in accordance with this regulation.

Chapter 137, *"Emission Statements,"* establishes requirements for the reporting of emissions from certain sources of air pollution. Based on the minimal potential facility emissions, BI&MR is not subject to the requirement to submit annual emission statements to the DEP.

Chapter 148, *"Emissions from Smaller-Scale Electric Generating Resources,"* was promulgated on August 9, 2004 and affects any non-mobile electric generators having a capacity greater than or equal to 50 kW and installed on or after January 1, 2005. BI&MR proposes to install and operate a diesel engine to directly drive the shredder, and does not propose to operate any electric generating units at this time.

Federal Regulations

Title 40 Code of Federal Regulations Part 60 (40 CFR 60), Subpart IIII: "*Standards of Performance for Stationary Compression Ignition Internal Combustion Engines,*" applies to diesel generators and other stationary diesels that commence construction, modification, or reconstruction after July 11, 2005 (as defined in 40CFR60). The proposed diesel engine was manufactured in 1967, and has not been modified or reconstructed.

Facility Air Emissions

Emission calculations were completed for the diesel drive unit and are provided in pounds per hour as well as tons per year. Emission calculations were estimated using the United States Environmental Protection Agency's (USEPA's) *Compilation of Air Pollution Emission Factors, Fifth Edition* (AP-42), DEP air quality regulations, mass balance techniques, and BACT findings.

Potential emissions are typically based on equipment operating at full capacity for 8,760 hours per year unless enforceable limits are imposed in a license. BI&MR has proposed to meet a fuel use limit of 300,000 gallons per year of low sulfur diesel. Therefore, potential emissions from the diesel unit are based on using low-sulfur diesel fuel and limiting annual fuel use. Table 1 of Appendix C contains the hourly and annual potential emissions for the diesel drive unit.

PM and PM10 emissions from the shredder will be controlled by the use of water sprays and are considered unquantifiable. The emissions from this process are regulated by a visible emission limit as described previously.

An annual emission fee, based on licensed potential emissions, is required for all licensed sources. Based on the proposed emissions limitations, the calculated emissions fee is below the minimum fee, therefore the fee will be the minimum fee of $353.00, as shown in Table 2. For new sources, the emission fee is required to be submitted at the time of the license application.

Public Notice

Appendix D contains a copy of the public notice text, which will run on June 17, 2010 in the Foster's Daily Democrat. A copy of the newspaper tear sheet will be submitted as soon as it is available.

If you have any questions regarding this application or if additional information is needed to accept this application as complete for processing, please call Alan Morrison at (207) 846-9897.

Very truly yours,

Alan Morrison

Alan Morrison
Vice President

Enc: Appendix A – Application Forms
Appendix B – USGS Topographic Map
Appendix C – Emissions Tables
Appendix D – Public Notice

cc: Mr. Robert Brenna, President, Berwick Iron and Metal Recycling, Inc.
Town Clerk, Berwick Town Hall

Appendix A

Application Forms

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Form No.	A-L-0006
Effective Date	2/15/06
Revision No.	05
Last Revision Date	12/2005
	Page 1 of 10

CHAPTER 115
AIR EMISSION LICENSE APPLICATION FORMS

State of Maine
Department of Environmental Protection
Bureau of Air Quality
17 State House Station
Augusta, Maine 04333-0017
phone: (207) 287-2437 fax: (207) 287-7641

Section A: FACILITY INFORMATION

Facility Name to Appear on License: Berwick Iron and Metal Recycling, Inc.

Physical Location: Route 236 City/Town: Berwick County: York

Facility Mailing Address: P.O. Box 366

City/Town: Berwick Zip Code: 03901

Facility Phone Number: (207) 698-9933

Facility / Application Description:

Berwick Iron and Metal Recycling, Inc. is a ferrous and non-ferrous metal recycling facility.

Berwick Iron and Metal Recycling, Inc. is submitting an application for an air emission license for the operation of a diesel powered metal shredder at their facility.

Current License #: A-
Application #: A- ____ - ____ - ____ - ____ (to be filled in by the Department)

Check When Done:

- x Application Completed
- x Copy Sent to Town (date sent: June 16, 2010)
- x Public Notice Published
  (paper name: Foster's Daily Democrat date: June 17, 2010
- x Enclosed Public Notice Tear Sheet (to follow when available)
- x Signed Signatory Form (section J)
- N/A If applicable, notified abutting landowners (major modification)
- x If applicable, enclosed check for fee (new sources)

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Facility Contact:

Name: Robert Brenna Title: President
Mailing Address: P.O. Box 366

City/Town: Berwick Zip Code: 03901
Phone: (207) 698-9933 Fax: (207) 698-9931
e-mail: rob.bimr@myfairpoint.com

Application Contact:

Name: Alan Morrison Title: Vice President
Mailing Address: Morrison Environmental Engineering. Inc.
16 Pine Meadows Lane
City/Town: North Yarmouth Zip Code: 04097
Phone: (207) 846-9897 Fax: (207) 846-9897
e-mail: meeinc@maine.rr.com

Billing Contact:

Name: Robert Brenna Title: President
Mailing Address: P.O. Box 366

City/Town: Berwick Zip Code: 03901
Phone: (207) 698-9933 Fax: (207) 698-9931
e-mail: rob.bimr@myfairpoint.com

Section B: FUEL BURNING EQUIPMENT

Emission Unit #	Type of Equipment (boiler, furnace, engine, etc)	Maximum Design Capacity (MMBtu/hr)	Maximum Firing Rate	Fuel Type (and %sulfur)	Date of Manufacture	Date of Installation	Stack #	Control Device
Diesel Drive Unit	IC Engine	27.4	200	Diesel, 0.05%	1967	2010	1	Timing Retarded

Monitors for Fuel Burning Equipment:

If applicable, indicate types of required/operated monitors, including Continuous Emission Monitors (CEM), Continuous Opacity Monitors (COM), parameter monitors for operational purposes, etc.

Emission Unit #	Type of Monitor	Data Measured
(example) Boiler #1	*CEM*	*NO_X*

Section C: INCINERATORS

N/A

	Incinerator Unit 1	Incinerator Unit 2
Incinerator Type (medical waste, municipal, etc.)		
Waste Type		
Make (Shenandoah, Crawford, etc.)		
Model Number		
Date of Manufacture		
Date of Installation		
Number of Chambers		
Max. Design Feed Rate (per load)	lb	lb
Max. Design Combustion Rate	lb/hr	lb/hr
Heat Recovery? (Yes or No)		
Retention Time	seconds	seconds
Automatic Feeder? (Yes or No)		
Temperature Range Primary	to °F	to °F
Secondary	to °F	to °F
Auxiliary Burner - Primary Chamber max. rating (MMBtu/hr)		
type of fuel used		
Auxiliary Burner - Secondary Chamber max. rating (MMBtu/hr)		
type of fuel used		
Annual Waste Combusted for (yr)		
Pollution Control Equipment (if any)		
Stack Number		
Monitors (ie - temperature recorder)		

Section D: PROCESS EQUIPMENT

N/A

Emission Unit #	Type of Equipment	Maximum Raw Material Process Rate (name and rate)	Maximum Finished Material Process Rate (name and rate)	Date of Manufacture	Date of Installation	Stack #	Control Device
Kilns (example)	*Drying Kilns*	*N/A*	*25 MMBF/year*	*1990*	*1990*	*N/A*	*None*
Shredder	Metal Shredder	50-100 tons/hr	50-100 tons/hr	1988	2010	NA	Water sprays

Parts Washers/Solvent Degreasers

Emission Unit #	Capacity (gallons)	Solvent Used
Degreaser #1 (Example)	*15 (Example)*	*Kerosene (Example)*
N/A		

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PROCESS EQUIPMENT (section D cont'd)

Chemical Usage

Note: Complete this section for any chemicals integral to the process unit, for example, a cementing process for outersoles, dyes, surface coating, printing, cleaning, etc. Attach additional pages or MSDS sheets as needed.

Process	Chemical compound used in process	Actual Compound Usage (gal or lb for yr ____)	Hazardous chemical(s) in compound	Percent VOC[1] (%)	Percent HAP[2] (%)	Total VOC emitted (lb/year)	Total HAP emitted (lb/year)
N/A							

[1]Volatile Organic Compounds
[2]Hazardous Air Pollutants

Describe method of recordkeeping (ie. monthly calculations from purchase records, flow monitors on solvent tanks, etc.)

Describe method used to calculate VOC/HAP emitted (ie – test results, if control equipment was taken into account; if conditions exist where solvents remain in the substrate rather than complete volatilization, etc.)

Section E: STACK DATA

Stack #	Height above ground (ft)	Inside Diameter (ft)	Exit Temperature °F	Exhaust Flow Rate (ft^3/sec) (indicate actual or standard)
1	32.0 ft	2	725	365

Section F: ANNUAL FACILITY FUEL USE

Total Fuel Consumption by Month for: NA (year)

	Fuel Type: Low Sulfur Diesel	Fuel Type:	Fuel Type:
Avg % sulfur (oil)	0.05%		
Avg % moisture (wood)	NA		
(Circle one: gals, tons, scf)	gals, tons, scf	gals, tons, ccf	gals, tons, scf
January			
February			
March			
April			
May			
June			
July			
August			
September			
October			
November			
December			
Total			
Proposed Annual Limit	300,000		

Section G: LIQUID ORGANIC MATERIAL STORAGE

Tank #					
Capacity (gallons)					
Materials Stored					
Reid Vapor Pressure					
Annual Throughput					
Above or Below Ground?					
Tank Type (floating or fixed, riveted or bolted, etc.)					
Physical Description – year installed					
Physical Description – color					
Dimensions – height (ft)					
Dimensions - diameter (ft)					
Construction Type					
Control Device					

Section H: MISCELLANEOUS

Note: Use this section to describe any equipment, activities, or other air emission sources that did not fit in any of the above categories. Include descriptions of the associated emissions. Attach additional pages if necessary.

Section I: BPT/BACT AND OTHER ATTACHMENTS

BPT/BACT Analysis:

For license renewals for existing equipment, applicants are required to submit a Best Practical Treatment (BPT) analysis to the Department. A BPT analysis establishes what equipment or requirements are appropriate for control or reduction of emissions of regulated pollutants to the lowest possible level considering the existing state of technology, the effectiveness of available alternatives, and the economic feasibility.

For new licenses or the addition of new equipment to existing licenses, applicants are required to submit a Best Available Control Technology (BACT) analysis. A BACT analysis is a top-down approach to selecting air emission controls. It is done on a case-by-case basis and develops emission limits based on the maximum degree of reduction for each pollutant emitted taking into account economic, environmental and energy impacts.

☐ I certify that, to the best of my knowledge, the control equipment, fuel limitations, and process constraints outlined in this application represent BPT/BACT for the equipment and processes listed.

OR

☒ I have attached a separate BPT / BACT analysis to this application.

Other Attachments:

Please list any attachments included with this application.

Cover Letter/BACT

Appendix A – Application Forms

Appendix B – USGS Map

Appendix C – Emissions Tables

Appendix D – Public Notice

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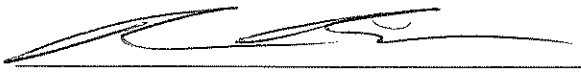
Section J: SIGNATORY REQUIREMENT

Each application submitted to the Department must include the following certification signed by a Responsible Official*:

"I certify under penalty of law that, based on information and belief formed after reasonable inquiry, I believe the information included in the attached document is true, complete, and accurate."



Responsible Official Signature

June 17, 2010
Date

Robert Brenna
Responsible Official (Printed or Typed)

President
Title

*A Responsible Official is defined by MEDEP Chapter 100 as:

A. For a corporation: a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit and either:

(1) The facilities employ more than 250 persons or have gross annual sales or expenditures exceeding $25 million (in second quarter 1980 dollars); or

(2) The delegation of authority to such representatives is approved in advance by the permitting authority;

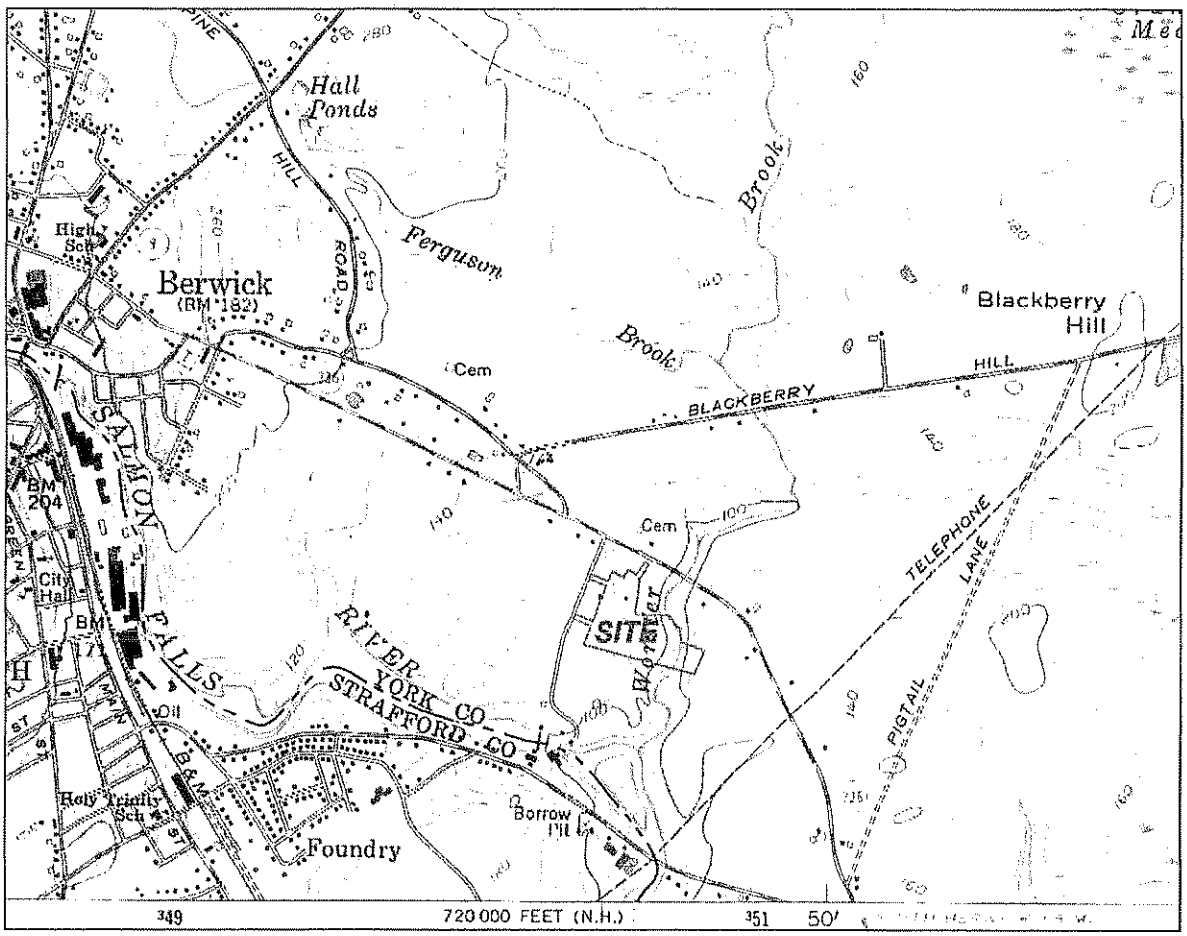
B. For a partnership or sole proprietorship: a general partner or the proprietor, respectively;

C. For a municipality, State, Federal, or other public agency: Either a principal executive officer or ranking elected official. For the purposes of this part, a principal executive officer of a Federal agency includes the chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., a Regional Administrator of EPA).

Appendix B

USGS Map

SECTION 3
TOPOGRAPHIC MAP



Portion of

U.S.G.S. SOMERSWORTH, MAINE - N.H. QUADRANGLE

7.5 Minute Series (TOPOGRAPHIC)

1" ≈ 2000'

1958 (Photorevised 1973

Appendix C

Emissions Tables

TABLE 1
Controlled Hourly and Annual Emissions from Diesel Drive Unit

Berwick Iron and Metal Recycling, Inc.
Berwick, Maine

POTENTIAL HOURLY EMISSIONS WITH TIMING RETARDED

Unit	Maximum Fuel Input (gal/hr)	SO_2 Emissions	NOx Emissions	CO Emissions	PM_{10} Emissions	VOC Emissions
Diesel Engine Emission Factors[1,2,3]		**0.05 lbs/MMBtu**	**1.9 lbs/MMBtu**	**0.85 lbs/MMBtu**	**0.12 lbs/MMBtu**	**0.09 lbs/MMBtu**
Typical Expected	150	1.03 lbs/hr	39.05 lbs/hr	17.47 lbs/hr	2.47 lbs/hr	1.85 lbs/hr
Maximum Rated	200	1.37 lbs/hr	52.06 lbs/hr	23.29 lbs/hr	3.29 lbs/hr	2.47 lbs/hr

ANNUAL EMISSIONS WITH LIMITED FUEL USE AND TIMING RETARDED

Unit	Maximum Expected Fuel Input (gal/hr)	Potential Hours of Operation	Potential Fuel Usage (gal)	Potential SO_2 Emissions	Potential NOx Emissions	Potential CO Emissions	Potential PM_{10} Emissions	Potential VOC Emissions
Diesel Engine Emission Factors[1,2,3]				**0.05 lbs/MMBtu**	**1.9 lbs/MMBtu**	**0.85 lbs/MMBtu**	**0.12 lbs/MMBtu**	**0.09 lbs/MMBtu**
Diesel Engine	150	2000	300,000	2,055.0 lbs	78,090.0 lbs	34,935.0 lbs	4,932.0 lbs	3,699.0 lbs
Total Emissions in lbs				2,055.0 lbs	78,090.0 lbs	34,935.0 lbs	4,932.0 lbs	3,699.0 lbs
Total Emissions in tons				1.03 tons	39.05 tons	17.47 tons	2.47 tons	1.85 tons

1. SO2 emission factor based on mass balance calculation assuming a fuel sulfur content of 0.05%.
2. NOx, CO, PM10, and VOC emission factors based on EPA AP-42, *Compilation of Air Pollutant Emission Factors, Volume 1*", Table 3.4-1 for Large Stationary Diesels
3. Potential emissions based on proposed license limit of 2000 hours of operation per year, and "typical" high fuel flow rate.
4. Diesel Heating Value assumed to be 0.137 MMBtu/gal.

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TABLE 2
Fee Calculation

Berwick Iron and Metal Recycling, Inc.

Potential Facility Emissions	
SO2	1.0 tons/yr
NOx	39.0 tons/yr
PM	2.5 tons/yr
VOC	1.8 tons/yr
Total	**44.4 tons/yr**

Note: CO is not included in the fee calculations.

2010 Air Emission Fees	
from 1 to 1000 tons	$7.69 per ton
1001 to 4000 tons	$15.41 per ton
over 4001 tons	$23.08 per ton

minimum fee	$353.00
maximum fee	$212,593.00

Facility Fee = 44.4 tons x $7.69 = $341.44 <$353.00

Therefore, fee is	**$353.00**

Appendix D

Public Notice

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1. *For Renewals, New Minor Sources, Minor Modifications and Transfers: To be advertised once by the applicant in a newspaper of general circulation in the area of the project location, within 30 days prior to the filing of the application.*
2. *For New Major Source Licenses and Major Modifications: To be advertised for three consecutive weeks in the public notice section of a Sunday or weekend newspaper of general circulation in the region in which the source is located.*
3. *For major modifications, new major sources, new Part 70 sources, or transfers this notice must also be mailed by certified mail to all abutting landowners, within 30 days prior to the filing of the application.*
4. *One copy of each of the "published" notices are to be submitted with the application.*

PUBLIC NOTICE OF INTENT TO FILE

Please take notice that **Berwick Iron & Metal Recycling, Inc., 106 Route 236, Berwick (207) 698-9933**
(name, address, and phone number of applicant)
intends to file Air Emission License applications with the Maine Department of Environmental Protection (DEP) pursuant to the provisions of 38 M.R.S.A., Section 590
on **June 18, 2010** The applications are **to obtain air emission licenses**
(submittal date)
for the operation of a metal shredder and diesel drive unit.
(summary of project)

According to Department regulations, interested parties must be publicly notified, written comments invited, and if justified, an opportunity for public hearing given. A request for a public hearing or for the Board of Environmental Protection to assume jurisdiction must be received by the Department, in writing, no later than 20 days after the applications are accepted by the Department as complete for processing.

The applications and supporting documentation are available for review at the Bureau of Air Quality (BAQ) DEP offices in Augusta, (207) 287-2437, during normal working hours. A copy of the applications and supporting documentation will also be available at the municipal offices in **Berwick,** Maine.
(town)

Written public comments may be sent to **Marc Cone** at the Bureau of Air
(project manager)
Quality, State House Station #17, Augusta, Maine 04333.

Place your ad online Anytime 24/7
www.fosters.com/placeanad
Or email fddads@fosters.com

Foster's Daily Democrat
Classifieds

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Three convenient locations:
150 Venture Drive, Dover
90 North Main Street, Rochester
8 Market Square, Portsmouth
All offices open 8 a.m. to 5 p.m.
For today's classifieds and more visit us online at fosters.com

www.fosters.com/classifieds

D

Thursday, June 17, 2010


Transportation

Real Estate


Employment


Merchandise


Pets

Announcements | Announcements

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PUBLIC NOTICE OF INTENT TO FILE

Please take notice that Berwick Iron & Metal Recycling, Inc., 106 Route 236, Berwick (207)698-9833 intends to file Air Emission License applications with the Maine Department of Environmental Protection (DEP) pursuant to the provisions of 38 M.R.S.A., Section 590 on June 18, 2010. The applications are to obtain air emission licenses for the operation of a metal shredder and diesel drive unit.

According to Department regulations, interested parties must be publicly notified, written comments invited, and if justified, an opportunity for public hearing given. A request for a public hearing or for the Board of Environmental Protection to assume jurisdiction must be received by the Department, in writing, no later than 20 days after the applications are accepted by the Department as complete for processing.

The applications and supporting documentation are available for review at the Bureau of Air Quality (BAQ) DEP offices in Augusta, (207) 287-2437, during normal working hours. A copy of the applications and supporting documentation will also be available at the municipal offices in Berwick, Maine.

Written public comments may be sent to Marc Cone (project manager) at the
Quality, State House Station #17, Augusta, Maine 04333.

PUBLIC NOTICE
New Durham Planning Board Excavation Permit

An Acceptance and Public Hearing will be held by the New Durham Planning Board at 7:00 PM on Tuesday, July 6, 2010 at the New Durham Public Library. The meeting is regarding an application Keith Babb for an expanded Excavation Permit on property located on 46 Kings Highway Road, (Tax Map 219, Lot 005) in New Durham.

18 Request for Bids | 18 Request for Bids

SCHOOL ADMINISTRATIVE UNIT FORTY FOUR
Strafford School District
23-A Mountain Avenue
Northwood, NH 03261
(603) 942-1290 o Fax (603) 942-1295

Request for Qualifications

CLERK OF THE WORKS SERVICES FOR CONSTRUCTION OF ADDITIONS & RENOVATIONS TO THE STRAFFORD SCHOOL

Interested parties are invited to submit a Qualifications Statement to provide Clerk-of-the-Works Services for the Construction of Additions & Renovations to the Strafford School, Center Strafford, NH.

A copy of the qualification requirements [illegible]

18 Request for Bids | 18 Request for Bids

WAKEFIELD SCHOOL DISTRICT
OFICE OF THE SUPERINTENDENT
18 Commerce Way Unit #1
Milton, NH 03851
603-652-0252

INVITATION TO BID
PAUL SCHOOL ROOF REPAIR/REPLACEMENT

The Wakefield School District is accepting sealed bids for the replacement of the membrane roof section at the Paul School, in Sanbornville, NH. The approximate area to be removed and replaced with Coal Tar Built up Roofing is 5,000 Sq Ft.

Specifications may be obtained at the Superintendent's Office, 18 Commerce Way Unit #1, Milton, NH 03851, Toby Eaton, 603-652-0262 or at the Paul School Office by calling Denis at 603-522-8891. All bids, clearly marked "PAUL SCHOOL BUILT UP ROOF" must be returned to the Superintendent's Office by 2:00 PM on Thursday, June 24, 2010.

The Wakefield School District reserves the right to accept, reject, modify or negotiate any and/or all bids, or any portion thereof, in the best interest of the Wakefield School Districts.

18 Request for Bids | 18 Request for Bids

CITY OF DOVER
REQUEST FOR BID

The City of Dover will accept sealed bids for the following item(s) until such time indicated below:

RFP #B10090 -
Sidewalk Improvements 2010

All proposals/bids must be received by July 6, 2010 at 2:00 p.m. EST

Specifications for the above are available in the Purchasing Office, City of Dover, 288 Central Avenue, Dover, NH 03820 or on our website at www.dover.nh.gov. The City of Dover reserves the right to accept any and all bids, to award the bid to other than the low bidder if deemed "bid most advantageous to the City" and to waive any defects in bids.

17 Public Notice | 17 Public Notice

PUBLIC NOTICE

The Department of the Navy announces the availability of the Proposed Plan for public comment on the cleanup of contamination at Operable Unit (OU) 1 – Site 10 at Portsmouth Naval Shipyard (PNS). This plan was prepared under the Comprehensive Environmental Response, Compensation and Liability Act (also known as Superfund). The public comment period for this Proposed Plan begins June 17, 2010 and ends July 16, 2010.

OU1 is a small peninsula located within the Controlled Industrial Area of PNS. Soil at OU1 was contaminated when piping and an underground storage tank associated with the disposal system for waste battery acid leaked. Use of the system was then discontinued. The leaks resulted in contamination in saturated soil (below the high tide water level) at concentrations that could

18 Request for Bids | 18 Request for Bids

ORCSD Lenovo June 2010 RFP

The Oyster River Cooperative School District is accepting bids on an RFP for Lenovo computers. For a bid package, please email Sonja Gonzalez at Oyster River Cooperative School District Information Technologies Office <sgonzalez@orcsd.org>. Please include in the subject "Request for Lenovo June 2010 RFP". Bids are due June 25, 2010 at 3pm.

Employment | Employment

146 Help Wanted | 146 Help Wanted

MILTON SCHOOL DISTRICT
OFFICE OF THE SUPERINTENDENT
18 Commerce Way Unit #1
Milton, NH 03851
603-652-0252

INVITATION TO BID
1890 BUILDING; ROOF, DORMER, CUPOLA PROJECT

The Milton School District is accepting sealed bids for the roof replacement, dormer and cupola repair project at the Nute High School, in Milton, NH.

The guidelines describing the scope of the work may be obtained at the Superintendent's Office, 18 Commerce Way Unit #1, Milton, NH 03851, Toby Eaton, 603-652-0262 or at the Nute High School & Library Office by calling Bob at 603-652-4591. All bids, clearly marked "1890 BUILDING; ROOF, DORMER, CUPOLA PROJECT " must be returned to the Superintendent's Office by 2:00 PM on Thursday, June 24, 2010.

The Milton School District reserves the right to accept, reject, modify or negotiate any and/or all bids, or any portion thereof, in the best interest of the Milton School District.

17 Public Notice | 17 Public Notice

Employment | Employment

146 Help Wanted | 146 Help Wanted

CONSTRUCTION HELP

Looking to fill the following positions for up coming projects Superintendents, Pipe Foreperson, Pipe Layers, equipment operators,Laborers, CDL drivers for Trailers and Tri-axles. Experience required. Please apply within

Thibeault Corporation
603 old Mammoth Road
Londonderry, NH. 03053

Technical Sales
Electrical/Photonics Engineer

Fiber Optics Manufacturer in Somersworth, NH looking for experienced professionals.
Bachelor's degree in relevant field required.
Competitive salary, benefits.
For more information:
www.eigenlight.com/careers.cfm
Send resume to:
EigenLight Corporation
mep@eigenlight.com
Fax: 603-692-9205

146 Help Wanted | 146 Help Wanted

KITTERY SCHOOL DEPARTMENT
2010-2011 Vacancy

School Nurse
R.W. Traip Academy
Grades 9-12
BSN required. Experience preferred

Candidates submitting a cover letter, district application, three current letters of reference, copy of license/certification and transcripts will be considered for this position.

Applicants must be certified or eligible for appropriate certification.

Applications available at:
www.kitteryschools.org
CLOSING DATE: July 12, 2010

Personals

22 Adoption

ADOPT: A nurturing, financially secure LOVING HOME waits for 1st baby to LOVE forever. Expenses paid. Call Lisa 1-800-805-1421

Employment

146 Help Wanted

BATH HOUSE CLEANERS Must have drivers license & be able to work nights & weekends. Apply in person at campground 21 Flat Rock Bridge Rd, Lebanon.

FRONT DESK
Position available part time at Oceanfront Resort in Ogunquit. You must be highly motivated with computer skills for a fast paced office & schedule requires nights & weekends.
Please call:
The Terrace By The Sea for an Interview:
207-646-3232

HAIR STYLIST
with clientele for booth rental or employee option available for Dover/ Somersworth salon
Call Cathy
603-781-1255

146 Help Wanted

MAINTENANCE PERSON part-time 20 hours per week. Plumbing & painting experience a must. 508-400-3354

OFFICE ASSISTANT/ RECEPTIONIST:
Madison Resource Funding

3H

5604

54-153/114
455

BERWICK IRON & METAL RECYCLING
106 ROUTE 236
BERWICK, ME 03901
(207)698-9933

EXPLANATION	AMOUNT	

PAY AMOUNT OF Three Hundred and Fifty Three and 00/100 DOLLARS

Security Features Details on Back.

DATE	TO THE ORDER OF	GROSS	DESCRIPTION	CHECK NUMBER
6/17/10	Treasurer State of Maine		permit Fee	5604

$ 353.00

CITIZENS BANK
NEW HAMPSHIRE

MP
AUTHORIZED SIGNATURE

A/MEPF Llc

NK16B

GUARDIAN®SAFETY

⑈005604⑈ ⑆011401533⑆ 3311166061⑈

CIVIL CONSULTANTS

P. O. Box 100
South Berwick
Maine
03908
207-384-2550
FAX 384-2112

35

Transmittal

Maine Department of Environmental Protection

Bureau of Air Quality

17 State House Station

Augusta Maine 04333-0017

Date 17 June 2010

Job No. 0547901 - BI&MR Shredder - Air Permit

Attention Mr. Marc Cone

We are sending you

_X_ *attached* ___ *prints* _X_ *other*

___ *shop drawings* ___ *copy of letter* ___ *specifications* ___ *under separate cover (via)*

___ *plans* ___ *work sheets* ___ *change order*

copies	*date*	*pages*	*description*
1	16 June 2010	many	Air Emission License - New Source Application package for Berwick Iron & Metal Recycling, Inc. Berwick, Maine
1		1	Application Fee ($353.00)
1	17 June 2010	1	"Tear" sheet verifying publication of public notice

These are transmitted as checked below:

_X_ *for approval* ___ *for your use* ___ *as requested* ___ *for review & comment*

___ *submit copies for distribution* ___ *for your information* ___ *prints returned after loan to us*

Remarks: Please find attached an Air Emission License - New Source Application for Berwick Iron & Metal Recycling, Inc.

The "tear" sheet verifying publication of the public notice became available after the package was prepared and is included herewith.

If you have any questions, please feel free to contact Morrison Environmental Engineering, Inc. or this office.

NOTE: A complete copy of the application materials (less fee) has been filed with the Town Clerk in Berwick, Maine.

Copies: *File, Out, Grey, Client, Town*

Signed: Jay E. Stephens

Jay E. Stephens, P.E.

J:\aaa\2005\0547901\DEP\air\20100617ApplicationTRNS.doc

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STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION

317

JOHN ELIAS BALDACCI
GOVERNOR

DAVID P. LITTELL
COMMISSIONER

July 28, 2010

Mr. Robert Brenna, President
Berwick Iron & Metal Recycling, Inc
PO Box 366
Berwick, ME 03901

RE: Berwick Iron & Metal Recycling, Inc's Application for Chapter 115 New Minor Source

Dear Mr. Brenna:

Your application for an air emission license has been received by the Department of Environmental Protection. The following application tracking number(s) have been assigned to this application: 552837. This application is expected to be addressed in license number A-1041-71-A-N.

If you have any questions concerning your application, write or call Lynn Cornfield, the project manager for your application. Our main office number is (207) 287-2437. Prior to final issuance you will receive a copy of your draft air emission license for your review.

Your application has been accepted for processing. However, if materials that have been submitted are incomplete or additional materials are deemed necessary by the Department, processing of the application will be stopped until the required information has been submitted. This application was considered acceptable for processing on July 27, 2010.

Sincerely,

Marc Allen Robert Cone

Marc Allen Robert Cone, P.E.
Bureau of Air Quality

pc: Air Licensing File
Alan Morrison, Vice President, Morrison Environmental Engineering, Inc

AUGUSTA
17 STATE HOUSE STATION
AUGUSTA, MAINE 04333-0017
(207) 287-7688 FAX: (207) 287-7826
RAY BLDG., HOSPITAL ST.

BANGOR
106 HOGAN ROAD, SUITE 6
BANGOR, MAINE 04401
(207) 941-4570 FAX: (207) 941-4584

PORTLAND
312 CANCO ROAD
PORTLAND, MAINE 04103
(207) 822-6300 FAX: (207) 822-6303

PRESQUE ISLE
1235 CENTRAL DRIVE, SKYWAY PARK
PRESQUE ISLE, MAINE 04679-2094
(207) 764-0477 FAX: (207) 760-3143

web site: www.maine.gov/dep

Morrison
Environmental
Engineering

August 26, 2010

Ms. Lynn Cornfield
Department of Environmental Protection
Bureau of Air Quality
17 State House Station
Augusta, Maine 04333-0017

Re: Addendum to NOx BACT Evaluation
Berwick Iron & Metal Recycling, Inc.

Dear Ms. Cornfield:

On behalf of Berwick Iron & Metal Recycling, Inc. (BI&MR), Morrison Environmental Engineering, Inc. (MEE) is submitting an addendum to the Best Available Control Technology (BACT) evaluation conducted for the proposed emissions of oxides of nitrogen (NOx).

Diesel Drive Unit

A 3600 HP 20-cylinder turbocharged General-Motors Model 3410 diesel locomotive engine is proposed to be used to provide power for the shredder. The following is a summary of the control systems proposed to meet the requirements of BACT for this engine.

BI&MR has found that a similar unit operating out of state has tracked their actual fuel use and found that they average about 45 gallons per hour. Therefore, BI&MR is now willing to accept a lower annual fuel use limit than originally proposed. BI&MR is proposing a reduced fuel limit of 150,000 gallons of low sulfur diesel fuel per year, based on an estimated average fuel use of less than 75 gallons per hour.

BI&MR further proposes to minimize peak daily and seasonal emissions by limiting operations to 8 hours per day, 40 hours per week, and 50 weeks per year, for a total of 2000 hours per year of operation. Hours will be tracked through the use of a non-resettable hour meter. Fuel use will be tracked through purchase records and inventory tracking.

Based on the revised fuel use proposal, NOx emissions would be limited to 19.5 tons per year (TPY). A review of BACT determinations for other diesel units in Maine shows that BACT is often based on the limitation of NOx to a specific ton per year value of 20 TPY or less. The proposed annual NOx limit of 19.5 TPY is consistent with this approach.

Best Available Control Technology (BACT)

For any new or modified emission unit, a facility is required to demonstrate that the unit to be constructed, reconstructed or modified will receive Best Available Control Technology (BACT). BACT is defined as an emission limitation based on the maximum degree of reduction for each pollutant emitted through the application of production processes or available methods, systems, and techniques taking into account energy, environmental, and economic impacts and other costs.

NOx emissions from internal combustion engines are primarily reduced by optimizing combustion to limit NOx formation or by using add-on control equipment. The following is a brief description of the standard control systems considered for NOx.

Selective Catalytic Reduction (SCR) is an add-on control designed to treat the exhaust stream by injecting urea ($CO(NH_2)_2$) or ammonia (NH_3) in the flue gas. The reagent reacts with the NOx in the presence of a catalyst to form water and nitrogen. Based on a 2008 report by the California Air Resources Board, potential NOx reduction in diesel engines can range from 50% to 90%. The cost for an SCR unit for this engine is estimated to be a minimum of $180,000. There would also be additional transportation, installation, and testing cost. The annual operational costs would also include chemical usage at a total cost of about $18,000 per year. Load fluctuations are expected in this process, which can cause variations in exhaust temperature and NOx concentration and create problems with the effectiveness of the SCR system. In addition to the high cost of installation and operation, there are also environmental and safety risks that are incurred from the use of ammonia or urea. Based on these costs and considering the revised fuel use limit, the expected cost of SCR would be in the order of $5,500 per ton of NOx reduction, which is considered prohibitive for a source of this type.

Control Costs	**SCR**
Capital	$180,000.00
Ammonia	$18,000.00
Annual Cost*	$54,000.00
Percent Reduction	50%
Reduction (TPY)	9.76
Cost/ton	$5,532.08

*Annualized over 5 years

Selective Non-Catalytic Reduction (SNCR) is also used as an add-on NOx control, and involves the injection of ammonia or urea into the exhaust stream without the use of a catalyst. The reduction reaction typically requires ammonia injection at a point where the temperature is between 1,600-2,100 degrees Fahrenheit (°F). However, the exhaust temperature at BI&MR is expected to be 750°F; therefore, SNCR is not suitable for this application. SNCR systems using exhaust re-burn technologies exist, but are typically more expensive than SCR, and therefore are considered impractical.

Natural Gas Firing could also be considered an option for reducing NOx emissions. However, due to the operation of large pieces of mobile equipment in the confines of the scrap metal yard, BI&MR is concerned about the potential safety risks of using gas at its facility. Therefore, the use of gaseous fuel was considered impractical for this application.

Ignition Timing Retard (ITR) is an effective and reliable method of NOx control for diesel engines. This approach delays the fuel injector timing to minimize peak combustion temperature. ITR reduces NOx formation, and this is balanced against the potential for increasing CO and particulate matter (PM) emissions. Therefore, BI&MR proposes to use a type of fuel injector and turbocharger aftercooler which will help offset these limitations and improve the efficacy of ITR.

The proposed unit has been fitted with GM Ecotip fuel injectors, which are designed to improve the fuel input pattern and improve fuel efficiency. These injectors reduce visible emissions, PM, carbon monoxide (CO), and volatile organic compound (VOC) emissions significantly, compared to standard injectors. This improves the ability for retarding the timing in order to reduce NOx emissions.

Turbocharged engines use a turbine in the exhaust stream to power a separate compressor turbine in the air intake manifold. The engine that BI&MR proposes to use will be equipped with a GM/Electro-Motive four-pass aftercooler, which helps to decrease NOx formation by decreasing the combustion air temperature. The manufacturer has conducted testing showing that the four-pass aftercooler can reduce NOx emissions by 15% at full load, compared to the standard two-pass model.

Proper Operation and Good Combustion And Maintenance Practices help ensure proper operation of the diesel drive unit, thereby minimizing emissions. This includes controlling the shredder operations using integrated hardware and software to reduce energy usage, which will in turn reduce emissions from the diesel drive unit. The plant will be equipped with an automatic system for controlling operations such as shredder feed rate, feed roll pressure, engine throttle position, etc. By monitoring relevant variables, these controls maximize drive motor performance and control the feed rate, resulting in increased production efficiency, improved product, increased nonferrous recovery, and reduced power cost per ton. This reduced energy consumption also means that the engine fuel use will be minimized and that the loading is more consistent, reducing the potential for surging and/or lugging, thereby minimizing emissions from the drive unit.

Another important development in this generation of shredder is an improved power coupling between the drive unit and the shredder. BI&MR's proposed shredder uses a simple reduction gear to ensure that the shredder and diesel drive unit both operate at their optimum RPM range to maximize usable torque and minimize emissions. The shredder mill is expected to operate at approximately 600 RPMs, while the engine operates at approximately 850-900 RPMs.

Derating reduces cylinder pressures and temperatures thereby lowering NOx formation rates.The high power rating of the engine will help to prevent excessive engine lugging under load, which will help control visible emissions. Earlier shredders were often coupled with smaller engines, which could be bogged down during loading, potentially leading to concerns about visible emission. This proposed unit is expected to have sufficient power to operate more steadily, especially when used in conjunction with the automated controls described previously. This also means that for most of the time, the unit will be running at well below its maximum power rating. This will in effect de-rate the engine, which will significantly reduce NOx emissions.

Revised emissions tables showing the proposed controlled emissions are included with this letter. The proposed emissions are based on the United States Environmental Protection Agency (EPA) AP-42, "*Compilation of Air Pollutant Emission Factors, Volume I*", Table 3.4-1 for Large Stationary Diesels. The controlled NOx emissions values were based on the use of ignition timing retard. The combination of this control as well as the use of an annual fuel limit will control emissions to a level that additional add-on controls would not be economically feasible considering the type of facility and expected mode of operation.

The proposed AP-42 emission factor is 1.9 lb/MMBtu, which equates to 6.6 grams per horsepower-hour (g/hp-hr). As stated in the application, this engine hasn't been "reconstructed or modified," and therefore is not subject to 40 CFR 60 Subpart IIII. However, as a point of comparison, the proposed limit is less than the NSPS standard for similar size engines. The NSPS standard for pre 2007 engines with a displacement >10 liters per cylinder, is to meet the "Tier 1" standard in 40 CFR 94.8(a)(1). The Tier 1 standard calculated for this type of engine would be 8.6 g/hp-hr (based on its displacement of 10.6 liters per cylinder and speed rating of 900 RPM). As another point of comparison, the proposed emissions of 6.6 g-hp-hr are lower than the NSPS limit of 6.9 g/hp-hr for engines with a displacement of less than 10 liters per cylinder in Table 1 of 40 CFR 60 Subpart IIII.

In fact, the proposed emission rate in conjunction with the revised fuel limit would actually reduce emissions below what would have been obtained by installing a Tier 4 diesel engine with the originally proposed fuel limit.

Considering BI&MR's proposed configuration, and assuming a fuel use limit of 150,000 gallons per year, NOx emissions would be a maximum of 19.5 tons per year (TPY). Other units in Maine of similar size and configuration have had annual NOx limits imposed as the BACT determination, as follows:

Similar Facilities	**Licensed NOx Limit**
Merrill Blueberry	20 TPY
WPS New England Generation	20 TPY

Based on the review of other similar units and the proposed configuration, BI&MR proposes to meet the requirements of BACT by limiting NOx emissions to 19.5 TPY. Emissions are based on an annual fuel limit of 150,000 gallons per year and the use of use of "Ecotip Injectors," a "Four Pass Intercooler," and ignition timing retard.

If you have any questions or if additional information is needed, please call Alan Morrison at (207) 846-9897.

Sincerely,

Alan Morrison

Alan Morrison
Vice President

Enc: Revised Emissions Tables

cc: Mr. Robert Brenna, President, Berwick Iron and Metal Recycling, Inc.
Jay Stephens, Civil Consultants

TABLE 1
Controlled Hourly and Annual Emissions from Diesel Drive Unit
(Revised)
Berwick Iron and Metal Recycling, Inc.
Berwick, Maine

POTENTIAL HOURLY EMISSIONS WITH TIMING RETARDED

Unit	Maximum Fuel Input (gal/hr)	SO_2 Emissions	NOx Emissions	CO Emissions	PM_{10} Emissions	VOC Emissions
Diesel Engine Emission Factors[1,2,4]		0.05 lbs/MMBtu	1.9 lbs/MMBtu	0.85 lbs/MMBtu	0.12 lbs/MMBtu	0.09 lbs/MMBtu
Typical Expected	75	0.51 lbs/hr	19.52 lbs/hr	8.73 lbs/hr	1.23 lbs/hr	0.92 lbs/hr
Maximum Rated	200	1.37 lbs/hr	52.06 lbs/hr	23.29 lbs/hr	3.29 lbs/hr	2.47 lbs/hr

ANNUAL EMISSIONS WITH LIMITED FUEL USE AND TIMING RETARDED

Unit	Maximum Expected Fuel Input (gal/hr)	Potential Hours of Operation	Potential Fuel Usage (gal)	Potential SO_2 Emissions	Potential NOx Emissions	Potential CO Emissions	Potential PM_{10} Emissions	Potential VOC Emissions
Diesel Engine Emission Factors[1,2,3]				0.05 lbs/MMBtu	1.9 lbs/MMBtu	0.85 lbs/MMBtu	0.12 lbs/MMBtu	0.09 lbs/MMBtu
Diesel Engine	75	2000	150,000	1,027.5 lbs	39,045.0 lbs	17,467.5 lbs	2,466.0 lbs	1,849.5 lbs
Total Emissions in lbs				1,027.5 lbs	39,045.0 lbs	17,467.5 lbs	2,466.0 lbs	1,849.5 lbs
Total Emissions in tons				0.51 tons	19.52 tons	8.73 tons	1.23 tons	0.92 tons

1. SO2 emission factor based on mass balance calculation assuming a fuel sulfur content of 0.05%.
2. NOx, CO, PM10, and VOC emission factors based on EPA AP-42, *Compilation of Air Pollutant Emission Factors, Volume I*", Table 3.4-1 for Large Stationary Diesels
3. Potential emissions based on proposed license limit of 2000 hours of operation per year, and "typical" expected fuel use rate.
4. Diesel Heating Value assumed to be 0.137 MMBtu/gal.

Prescott Jamieson Nelson & Murphy, LLC

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Attorneys and Counselors at Law

October 19, 2010

37 Beach Street
P.O. Box 1190
Saco, Maine 04072
Tel (207) 282-5966
Fax (207) 282-5968

75 Pearl Street
Suite 212
Portland, Maine 04101
Tel (207) 221-2079

ALAN S. NELSON*
NEIL D. JAMIESON, JR.
DANA E. PRESCOTT**
TIMOTHY S. MURPHY

*Also admitted in Connecticut
**Also admitted in Massachusetts

Of Counsel
EDWARD C. MALIK
Boston, Massachusetts

(207) 287-7641

VIA FAX AND FIRST CLASS MAIL

James Brooks, Director
Bureau of Air Quality
Department of Environmental Protection
17 State House Station
Augusta Maine 04333

Re: Comments on Air License – Berwick Iron & Metal Recycling, Berwick, Maine

Dear Mr. Brooks:

I am writing on behalf of my clients (Jeannette and Doug Seivwright, Robert and Donna Duffy, Tom and Carol Planche, Joyce and Raymond Provencher) who are all residents of Berwick, and who all live adjacent to or very near a facility known as Berwick Iron & Metal Recycling, Inc. ("BI&MR"). My clients are alarmed by the prospect of this facility expanding its operations to include auto shredding, and so they write to comment on BI&MR's pending application for a New Minor Source Air Emissions License from the Department of Environmental Protection ("DEP"). I understand the draft air emission license ("Draft License") for BI&MR is currently still pending final signature at the Air Bureau.

My clients' concerns surround a number of potential substantive and procedural flaws with both BI&MR's application materials and the draft license. These include: (1) Procedural inadequacies with the application's processing by the DEP; (2) the application of Best Available Control Technology and incorporation of applicable operating limits into the air license; (3) the need for compliance plans to be submitted by BI&MR prior to 2013; (4) the necessity for routine enforcement of limits on BI&MR's hours of operations and fuel use tracking; and (5) the lack of adequate ambient air quality analysis for this particular application.

Pursuant to DEP's regulations, an applicant pursuing more than one application may be required to submit all other applications before any such application will be accepted as complete for processing. See 06-096 CMR 2 § 11(C). BI&MR's application was submitted to the Air Bureau on or about June 16, 2010. See Application cover letter. The very nature of that application (for an automotive shredder and diesel drive unit) demonstrated

that BI&MR also needed a Solid Waste Processing Facility License. However, that specific application was not sent to the DEP's Solid Waste Division until September 16, 2010. Because the Air Bureau had sufficient notice that additional licensing would be required by BI&MR, the processing of the air application should have been delayed. Moreover, it appears that the Air Bureau did not publish the date it accepted BI&MR's applications as complete for processing. The report covering the time period between May 21, 2010 and September 9, 2010 as posted on the Board of Environmental Protection's ("BEP") website do not contain notice regarding the Air Bureau's acceptance of BI&MR's applications. As a result, the general public was not afforded the ability to file a request for public hearing or BEP jurisdiction on BI&MR's air application, as provided under 06-096 CMR 2 § 17(A).

Moreover, I am concerned that the operational limits that BI&MR must accept in order to satisfy an application of Best Available Control Technology ("BACT") and qualify as a synthetic minor are not all reflected in the Draft License. Pursuant to 06-096 CMR 115 § 4(B)(4)(d) the Diesel Drive Unit must undergo a BACT analysis. Furthermore, as a synthetic minor the facility must accept federally enforceable emissions limits and/or limits on the hours of operation.

BI&MR has stated in its application that it would accept certain operational limits. However, I am concerned that not all of these limits are articulated in the draft license. For example, in its August 25, 2010 addendum, BI&MR proposed that it would limit operations to 8 hours per day, 40 hours per week, and 50 weeks per year, for a total of 2000 hours per year of operation. This limit, which was meant to minimize peak daily and seasonal emissions, does not appear in the draft license. This operational limit as well as any other applicable limits should be included into the Draft License.

There are also concerns that the Draft License fails to institute needed enforcement provisions relating to the applicable limits on hours of operations and tracking of fuel usage. BI&MR has proposed to substantiate the amount of fuel it uses byway of fuel purchase records and inventory tracking. See Application at page 3. However, despite BI&MR's professed ability to self-regulate its fuel usage, it nonetheless has the opportunity to use more than 150,000 gallons per year. This is because diesel fuel will be kept at the BI&MR facility for "other portable or mobile equipment." Id. Hence, BI&MR will have the ability, should it choose to, to use more than 150,000 gallons but assert that the fuel was actually used by other equipment on site. Additional controls mandated by the DEP for inventory tracking are therefore necessary to prevent the possibility of BI&MR exceeding its proposed 2,000 operational hours per year, such as monthly reporting that will verify hours of operations and fuel usage.

Next, the Draft License states that because the diesel drive is subject to 40 CFR 63, Subpart ZZZZ, BI&MR must submit a written compliance plan prior to April 30, 2013. See Draft License at Sections B and 16(I). I am concerned as to why this compliance plan is required to be submitted two years in the future, as opposed to a more timely report period.

Furthermore, the Draft License devotes only two sentences to a discussion of BI&MR's ambient air quality analysis. This "discussion" is in actuality form language, which has appeared in another license issued for diesel engine emissions, that of Merrill Blueberry Farms, License

Number A-836-71-D-R. It is distressing that both applications, each of which allows 20 tons per year of Nitrogen oxide to be emitted, receive virtually no ambient air quality analysis from the DEP. BI&MR's location in southern Maine alone merits a more rigorous analysis.

Last, it is worth noting the following *de minimis* corrections needed in the Draft Order. First, in paragraph 16(A), the sentence is missing the word "sulfur" before content. Next, paragraph 16(B) is not consistent with paragraph 20 – the volumes cited need to be measured specific to the diesel fuel.

These above-listed concerns merit the additional study and attention of the DEP. I ask that you delay issuance of BI&MR's air emission license until all of these issues are fully analyzed and adequately resolved. Should this letter be received after the issuance of a license, I request that the DEP consider proactively modifying the license.

Sincerely,

Tim Murphy

Cc: Mark Cone, DEP
N. Lynn Cornfield, DEP
Jeannette and Doug Seivwright
Robert and Donna Duffy
Tom and Carol Planche
Joyce and Raymond Provencher

329

FAX

Attorneys and Counselors at Law
Prescott Jamieson Nelson & Murphy LLC

37 Beach Street
P.O. Box 1190
Saco, Maine 04072

Tel: (207) 282-5966
Fax: (207) 282-5968

To: Mr. James Brooks, ME DEP
Fax number: 287-7641

From: Timothy S. Murphy, Esq.

Date: Nov. 12, 2010

RE: Air License - Belwick Iron + Metal Recycling, Belwick ME

Number of Pages, including Cover Sheet: 3

Comments:

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Prescott Jamieson Nelson & Murphy, LLC

Attorneys and Counselors at Law

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75 Pearl Street
Suite 212
Portland, Maine 04101
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ALAN S. NELSON*
NEIL D. JAMIESON, JR.
DANA E. PRESCOTT**
TIMOTHY S. MURPHY

Also admitted in Connecticut
*Also admitted in Massachusetts

Of Counsel
EDWARD C. MALIK
Boston, Massachusetts

November 12, 2010

VIA FAX AND FIRST CLASS MAIL

James Brooks, Director
Bureau of Air Quality
Department of Environmental Protection
17 State House Station
Augusta Maine 04333

Re: Air License – Berwick Iron & Metal Recycling, Berwick, Maine

Dear Mr. Brooks:

On October 19, 2010, I submitted to the Bureau of Air Quality ("Bureau") a number of questions and concerns my Berwick, Maine-based clients had with regard to Berwick Iron & Metal Recycling's ("BI&MR") application for a New Minor Source Air Emissions License and the prepared license that had been drafted by the Department of Environmental Protection ("DEP"). I never received a response from the Bureau.

The recent Signed Department Orders Filed with the Board ("EFIS") report, posted[1] on the Board of Environmental Protection's website, alerted me to the fact that BI&MR's license, #A-001041-71-A-N, was issued and filed with the Board on October 27, 2010.

Pursuant to DEP Chapter 2 Rules, as a party that submitted written comments on a draft order,[2] the DEP was required to provide me a copy of the final order and notice of appeal rights. 06-096 CMR 2 § 18(B). That did not occur and as a result, the DEP is in violation of its own rules.

[1] According to the EFIS report, it was "printed" on November 5, 2010 – nine days after the decision was filed on October 27, 2010. It is unclear when the EFIS report was posted to the Board's website, as part of the Board Packet for the November 18, 2010 BEP meeting.

[2] In my October 19, 2010 letter, I wrote that my clients' concerns "impact the DEP's *draft air emission license* ("Draft License") for BI&MR that I understand is currently still pending final signature at the Air Bureau." (emphasis added). Having commented on the Draft License, I should have received a copy of the final licensing decision.

331

Any appeal on this license must be lodged by November 26, 2010. *Id.* at § 24(B)(1). Having not received a copy of the licensing decision, my clients are now at a disadvantage in preparing for a potential appeal without proper notice.

Last, the actual license has not yet been posted on the Air Bureau's Chapter 115 website. I respectfully request that you immediately email or fax to me a copy of the final Order for #A-001041-71-A-N. For your convenience my email is tmurphy@maine.rr.com

Sincerely,

Timothy S. Murphy

cc: Mark Cone, DEP
N. Lynn Cornfield, DEP
Jeanette and Doug Seivwright
Robert and Donna Duffy
Tom and Carol Planche
Joyce and Raymond Provencher

Prescott Jamieson Nelson & Murphy, LLC

333

Attorneys and Counselors at Law

37 Beach Street
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Saco, Maine 04072
Tel (207) 282-5966
Fax (207) 282-5968

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Portland, Maine 04101
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ALAN S. NELSON*
NEIL D. JAMIESON, JR.
DANA E. PRESCOTT**
TIMOTHY S. MURPHY

*Also admitted in Connecticut
**Also admitted in Massachusetts

Of Counsel
EDWARD C. MALIK
Boston, Massachusetts

November 12, 2010

VIA FAX AND FIRST CLASS MAIL

James Brooks, Director
Bureau of Air Quality
Department of Environmental Protection
17 State House Station
Augusta Maine 04333

Re: Air License – Berwick Iron & Metal Recycling, Berwick, Maine

Dear Mr. Brooks:

On October 19, 2010, I submitted to the Bureau of Air Quality ("Bureau") a number of questions and concerns my Berwick, Maine-based clients had with regard to Berwick Iron & Metal Recycling's ("BI&MR") application for a New Minor Source Air Emissions License and the prepared license that had been drafted by the Department of Environmental Protection ("DEP"). I never received a response from the Bureau.

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Last, the actual license has not yet been posted on the Air Bureau's Chapter 115 website. I respectfully request that you immediately email or fax to me a copy of the final Order for #A-001041-71-A-N. For your convenience my email is tmurphy@maine.rr.com

Sincerely,

Timothy S. Murphy

cc: Mark Cone, DEP
N. Lynn Cornfield, DEP
Jeanette and Doug Seivwright
Robert and Donna Duffy
Tom and Carol Planche
Joyce and Raymond Provencher

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MEMORY TRANSMISSION REPORT

TIME : NOV-15-2010 12:37PM
TEL NUMBER : 2877641
NAME : DEP AIR BUREAU

FILE NUMBER : 654

DATE : NOV-15 12:33PM

TO : 9-2072825968-13434

DOCUMENT PAGES : 012

START TIME : NOV-15 12:33PM

END TIME : NOV-15 12:37PM

SENT PAGES : 012

STATUS : OK

FILE NUMBER : 654 *** SUCCESSFUL TX NOTICE ***

Phone #: (207) 287-2437
Fax #: (207) 287-7641

Maine DEP
Bureau of Air Quality
17StateHouseStation
(Tyson Bldg.)
Augusta ME 04333

Fax

To: TIMOTHY S. MURPHY From: N. LYNN CORNFIELD
Fax: 282 5968 Pages: 12 w/c - Cover
Phone: Date: 11/15/2010
Re: BERWICK IRON CC:

☐ Urgent ☐ For Review ☐ Please Comment ☐ Please Reply ☐ Please Recycle

Comments:

336

Phone #: (207) 287-2437
Fax #: (207) 287-7641

Maine DEP
Bureau of Air Quality
17StateHouseStation
(Tyson Bldg.)
Augusta ME 04333

Fax

To: TIMOTHY S. MURPHY	**From:** N. LYNN CORNFIELD
Fax: 282 5968	**Pages:** 12 inc. Cover
Phone:	**Date:** 11/15/2010
Re: BERWICK IRON	**CC:**

☐ **Urgent** ☐ **For Review** ☐ **Please Comment** ☐ **Please Reply** ☐ **Please Recycle**

Comments:

STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION

JOHN ELIAS BALDACCI
GOVERNOR

BETH NAGUSKY
ACTING COMMISSIONER

15 November 2010

VIA FAX

Timothy S. Murphy,
Prescott Jamieson Nelson & Murphy, LLC,
P. O. Box 1190,
Saco, Maine 04076

Dear Mr. Murphy:

RE: Berwick Iron & Metal Recycling, Air License A-1041-71-A-N

In response to your letter dated 12 November 2010, addressed to James Brooks, Director, Bureau of Air Quality, I am forwarding with this letter, a copy signed license A-1041-71-A-N.

You will receive a response to other issues raised in your letters of 19 October 2010 and 12 November 2010, in a separate correspondence.

Yours truly,

N. Lynn Cornfield,
Licensing Engineer,
Bureau of Air Quality

AUGUSTA
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PRESQUE ISLE, MAINE 04679-2094
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web site: www.maine.gov/dep

STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION

JOHN ELIAS BALDACCI
GOVERNOR

BETH NAGUSKY
ACTING COMMISSIONER

Berwick Iron & Metal Recycling, Inc.
York County
Berwick, Maine
A-1041-71-A-N (SM)

Departmental
Findings of Fact and Order
Air Emission License

After review of the air emissions license application, staff investigation reports and other documents in the applicant's file in the Bureau of Air Quality, pursuant to 38 M.R.S.A., §344 and §590, the Department finds the following facts:

I. REGISTRATION

A. Introduction

1. Berwick Iron & Metal Recycling, Inc. (Berwick) has applied for an Air Emission License permitting the operation of emission sources associated with their ferrous and non-ferrous metal recycling facility.

2. The equipment addressed in this license is located at 106 Route 236, Berwick ME.

B. Emission Equipment

The following equipment is addressed in this air emission license:

Fuel Burning Equipment

Equipment	Maximum Capacity (MMBtu/hr)	Maximum Firing Rate (gal/hr)	Fuel Type, % sulfur	Stack #
Diesel Drive Unit	27.4	200	diesel, 0.0015%	1

Process Equipment

Equipment	Production Rate	Pollution Control Equipment
Texas Shredder Model 8104	100 TPH	Water Sprays

C. Application Classification

The new source is considered a major source based on whether or not expected emissions exceed the "Significant Emission Levels" as defined in the Department's regulations. The emissions for the new source are determined by the maximum future license allowed emissions, as follows:

Pollutant	Max. Future License (TPY)	Sig. Level
PM	1.2	100
PM_{10}	1.2	100
SO_2	0.1	100
NO_x	20.0	100
CO	8.7	100
VOC	0.9	50

The Department has determined the facility is a minor source and the application has been processed through *Major and Minor Source Air Emission License Regulations*, 06-096 CMR 115 (last amended December 24, 2005). With the fuel limit on the Diesel Drive Unit, Berwick is licensed below the major source thresholds and is considered a synthetic minor.

II. BEST PRACTICAL TREATMENT (BPT)

A. Introduction

In order to receive a license the applicant must control emissions from each unit to a level considered by the Department to represent Best Practical Treatment (BPT), as defined in *Definitions Regulation*, 06-096 CMR 100 (last amended December 24, 2005). Separate control requirement categories exist for new and existing equipment as well as for those sources located in designated non-attainment areas.

BPT for new sources and modifications requires a demonstration that emissions are receiving Best Available Control Technology (BACT), as defined in *Definitions Regulation*, 06-096 CMR 100 (last amended December 24, 2005). BACT is a top-down approach to selecting air emission controls considering economic, environmental and energy impacts.

B. Diesel Drive Unit

The Diesel Drive is a 3600 horsepower, 20-cylinder turbocharged General-Motors Model 20-645-E3 diesel locomotive engine, with a rated fuel input of 200 gallons per hour. The unit is equipped with GM Ecotip fuel injectors which reduce visible emissions, PM, carbon monoxide and volatile organic compound emissions. The Diesel Drive was manufactured in 1967, therefore, it is not subject to New Source Performance Standards 40 CFR Part 60, Subpart IIII, *Standards of Performance for Stationary Compression Ignition Internal Combustion Engines.*

Because of its size, the Diesel Drive is subject to the provisions 40 CFR Part 63, Subpart ZZZZ, including initial notification. Berwick shall provide to MEDEP a written compliance plan for Subpart ZZZZ prior to April 30, 2013.

A summary of the BACT analysis for the Diesel Drive is the following:

1. Berwick shall be limited to the use of 150,000 gallons per year of Diesel fuel in the Diesel Drive.
2. The Diesel Drive shall fire only diesel fuel with a maximum sulfur content not to exceed 15 ppm.
3. The Diesel Drive shall be equipped with Ecotip Injectors, a four pass Intercooler and ignition timing retard.
4. 06-096 CMR 103 regulates PM emission limits. The PM_{10} limits are derived from the PM limits.
5. NO_x emissions shall not exceed 20.0 tons per year based on a calendar year.
6. NO_x, CO, and VOC emission limits are based upon AP-42 data dated 10/96.
7. Berwick shall operate and maintain the Diesel Drive Unit in accordance with the manufacturer's written instructions. Berwick shall not change settings that are not approved in writing by the manufacturer. Berwick shall keep a copy of the manufacturer's written instructions on-site.
8. Visible emissions from the Diesel Drive shall not exceed 30 percent opacity on a six (6) minute block average, except for no more than two (2) six (6) minute block averages in a continuous 3-hour period.

C. Metal Shredder

The metal shredder is a Texas Shredder Model 8104, with a throughput capacity of 50 – 100 tons per hour, depending on the material being processed.

The potential emissions from the shredder are particulate matter from the physical impact of the shredder hammers on the materials as well as from the potential heating of the material by friction in the shredder. The shredder is equipped with water sprays which shall be used to minimize emissions. The shredder is equipped with an automatic system for controlling operations including the shredder feed rate, feed roll pressure, and engine throttle.

The shredder and the diesel drive unit are coupled with a reduction gear to ensure the shredder and the diesel drive unit both operate at their optimum speed to maximize useable torque and minimize emissions.

Visible emissions from the shredder shall not exceed 20 percent opacity on a six (6) minute block average basis, except for no more than one (1) six (6) minute block average in a 1-hour period.

D. Fugitive Emissions

Visible emissions from a fugitive emission source (including stockpiles and roadways) shall not exceed 20 percent opacity, except for no more than five (5) minutes in any 1-hour period. Compliance shall be determined by an aggregate of the individual fifteen (15)-second opacity observations which exceed 20 percent in any one (1) hour.

E. General Process Emissions

Visible emissions from any general process source shall not exceed 20 percent opacity on a six (6) minute block average basis, except for no more than one (1) six (6) minute block average in a 1-hour period.

F. Annual Emissions

Berwick shall be restricted to the following annual emissions, based on a 12-month rolling total, and on annual fuel usage of 150,000 gallons of diesel fuel:

Total Licensed Annual Emissions for the Facility
Tons per year
(Used to calculate the annual license fee)

	PM	PM_{10}	SO_2	NO_x	CO	VOC
Diesel Drive	1.23	1.23	0.02	20.00	8.73	0.92
Total TPY	**1.2**	**1.2**	**0.1**	**20.0**	**8.7**	**0.9**

III. AMBIENT AIR QUALITY ANALYSIS

According to 06-096 CMR 115, the level of air quality analyses required for a minor new source shall be determined on a case-by case basis. Based on the information available in the file, and the similarity to existing sources, Maine Ambient Air Quality Standards (MAAQS) will not be violated by this source.

ORDER

Based on the above Findings and subject to conditions listed below, the Department concludes that the emissions from this source:

- will receive Best Practical Treatment,
- will not violate applicable emission standards,
- will not violate applicable ambient air quality standards in conjunction with emissions from other sources.

The Department hereby grants Air Emission License A-1041-71-A-N subject to the following conditions:

Severability. The invalidity or unenforceability of any provision, or part thereof, of this License shall not affect the remainder of the provision or any other provisions. This License shall be construed and enforced in all respects as if such invalid or unenforceable provision or part thereof had been omitted.

STANDARD CONDITIONS

(1) Employees and authorized representatives of the Department shall be allowed access to the licensee's premises during business hours, or any time during which any emissions units are in operation, and at such other times as the Department deems necessary for the purpose of performing tests, collecting samples, conducting inspections, or examining and copying records relating to emissions (38 M.R.S.A. §347-C).

(2) The licensee shall acquire a new or amended air emission license prior to commencing construction of a modification, unless specifically provided for in Chapter 115. [06-096 CMR 115]

(3) Approval to construct shall become invalid if the source has not commenced construction within eighteen (18) months after receipt of such approval or if construction is discontinued for a period of eighteen (18) months or more. The Department may extend this time period upon a satisfactory showing that an extension is justified, but may condition such extension upon a review of either the control technology analysis or the ambient air quality standards analysis, or both. [06-096 CMR 115]

(4) The licensee shall establish and maintain a continuing program of best management practices for suppression of fugitive particulate matter during any period of construction, reconstruction, or operation which may result in fugitive dust, and shall submit a description of the program to the Department upon request. [06-096 CMR 115]

(5) The licensee shall pay the annual air emission license fee to the Department, calculated pursuant to Title 38 M.R.S.A. §353. [06-096 CMR 115]

(6) The license does not convey any property rights of any sort, or any exclusive privilege. [06-096 CMR 115]

(7) The licensee shall maintain and operate all emission units and air pollution systems required by the air emission license in a manner consistent with good air pollution control practice for minimizing emissions. [06-096 CMR 115]

(8) The licensee shall maintain sufficient records to accurately document compliance with emission standards and license conditions and shall maintain such records for a minimum of six (6) years. The records shall be submitted to the Department upon written request. [06-096 CMR 115]

(9) The licensee shall comply with all terms and conditions of the air emission license. The filing of an appeal by the licensee, the notification of planned changes or anticipated noncompliance by the licensee, or the filing of an application by the licensee for a renewal of a license or amendment shall not stay any condition of the license. [06-096 CMR 115]

(10) The licensee may not use as a defense in an enforcement action that the disruption, cessation, or reduction of licensed operations would have been necessary in order to maintain compliance with the conditions of the air emission license. [06-096 CMR 115]

(11) In accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department, the licensee shall:

A. perform stack testing to demonstrate compliance with the applicable emission standards under circumstances representative of the facility's normal process and operating conditions:

1. within sixty (60) calendar days of receipt of a notification to test from the Department or EPA, if visible emissions, equipment operating parameters, staff inspection, air monitoring or other cause indicate to the Department that equipment may be operating out of compliance with emission standards or license conditions; or
2. pursuant to any other requirement of this license to perform stack testing.

B. install or make provisions to install test ports that meet the criteria of 40 CFR Part 60, Appendix A, and test platforms, if necessary, and other accommodations necessary to allow emission testing; and

C. submit a written report to the Department within thirty (30) days from date of test completion.

[06-096 CMR 115]

(12) If the results of a stack test performed under circumstances representative of the facility's normal process and operating conditions indicate emissions in excess of the applicable standards, then:

A. within thirty (30) days following receipt of such test results, the licensee shall re-test the non-complying emission source under circumstances representative of the facility's normal process and operating conditions and in accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department; and

B. the days of violation shall be presumed to include the date of stack test and each and every day of operation thereafter until compliance is demonstrated under normal and representative process and operating conditions, except to the extent that the facility can prove to the satisfaction of the Department that there were intervening days during which no violation occurred or that the violation was not continuing in nature; and

C. the licensee may, upon the approval of the Department following the successful demonstration of compliance at alternative load conditions, operate under such alternative load conditions on an interim basis prior to a demonstration of compliance under normal and representative process and operating conditions.

[06-096 CMR 115]

(13) Notwithstanding any other provisions in the State Implementation Plan approved by the EPA or Section 114(a) of the CAA, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any statute, regulation, or Part 70 license requirement. [06-096 CMR 115]

(14) The licensee shall maintain records of malfunctions, failures, downtime, and any other similar change in operation of air pollution control systems or the emissions unit itself that would affect emission and that is not consistent with the terms and conditions of the air emission license. The licensee shall notify the Department within two (2) days or the next state working day, whichever is later, of such occasions where such changes result in an increase of emissions. The licensee shall report all excess emissions in the units of the applicable emission limitation. [06-096 CMR 115]

(15) Upon written request from the Department, the licensee shall establish and maintain such records, make such reports, install, use and maintain such monitoring equipment, sample such emissions (in accordance with such methods, at such locations, at such intervals, and in such a manner as the Department shall prescribe), and provide other information as the Department may reasonably require to determine the licensee's compliance status. [06-096 CMR 115]

SPECIFIC CONDITIONS

(16) **Diesel Drive Unit**

A. The Diesel Drive shall fire only diesel fuel with a maximum content not to exceed 15 PPM. [06-096 CMR 115, BACT]
B. Total fuel use for the Diesel Drive shall not exceed 150,000 gallons per year of diesel fuel based on a calendar year. Compliance shall be demonstrated by fuel records from the supplier showing the quantity, type of fuel delivered and sulfur content of the fuel. [06-096 CMR 115, BACT]
C. Emissions shall not exceed the following:

Emission Unit	Pollutant	lb/MMBtu	Origin and Authority
Diesel Drive Unit	PM	0.12	06-096 CMR 103(2)(B)(1)(a)

D. Emissions shall not exceed the following [06-096 CMR 115, BPT]:

Emission Unit	PM (lb/hr)	PM_{10} (lb/hr)	SO_2 (lb/hr)	NO_x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Diesel Drive Unit	3.29	3.29	0.04	52.06	23.29	2.47

E. Actual NOx emissions shall not exceed 20 tons per year, based on a calendar year. [06-096 CMR 115, BPT]
F. The Diesel Drive shall be equipped with Ecotip Injectors, a four pass Intercooler and ignition timing retard. [BPT]
G. Berwick shall operate and maintain the Diesel Drive Unit in accordance with the manufacturer's written instructions. Berwick shall not change settings that are not approved in writing by the manufacturer. [40 CFR 60.4211(a)]
H. Visible emissions from the Diesel Drive shall not exceed 30 percent opacity on a six (6) minute block average, except for no more than two (2) six (6) minute block averages in a continuous 3-hour period. [06-096 CMR 101]
I. Berwick shall provide to MEDEP a written compliance plan for 40 CFR Part 60, Subpart ZZZZ, prior to April 30, 2013.

(17) **Metal Shredder**

A. Berwick shall operate the water sprays at all times the shredder is in operation.
B. Visible emissions from the metal shredder shall not exceed 20 percent opacity on a six (6) minute block average basis, except for no more than one (1) six (6) minute block average in a 1-hour period.

(18) **Fugitive Emissions**

Visible emissions from a fugitive emission source (including stockpiles and roadways) shall not exceed of 20 percent opacity, except for no more than five (5) minutes in any 1-hour period. Compliance shall be determined by an aggregate of the individual fifteen (15)-second opacity observations which exceed 20 percent in any one (1) hour. [06-096 CMR 101]

(19) **Performance Test**

Berwick shall perform an initial performance test within 60 days after achieving the maximum production rate at which the facility shall be operated, but not later than 180 days after initial start-up of the facility. The performance test shall consist of Method 9 opacity testing, performed on both the Diesel Drive and the Shredder.

(20) Berwick may construct a common fuel storage tank to service the Diesel Drive and their mobile equipment. The fuel line to the Diesel Drive shall be metered.

(21) Berwick shall notify the Department within 48 hours and submit a report to the Department on a quarterly basis if a malfunction or breakdown in any component causes a violation of any emission standard (38 M.R.S.A. §605).

DONE AND DATED IN AUGUSTA, MAINE THIS 27th DAY OF October, 2010.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: James P. Pardy
BETH NAGUSKY, ACTING COMMISSIONER

The term of this license shall be five (5) years from the signature date above.

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: 7/27/2010
Date of application acceptance: 7/27/2010

Date filed with the Board of Environmental Protection:

This Order prepared by N. Lynn Cornfield, Bureau of Air Quality.

FILED
OCT 27 2010
BOARD OF ENVIRONMENTAL PROT.
STATE OF MAINE

STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION

JOHN ELIAS BALDACCI
GOVERNOR

BETH NAGUSKY
ACTING COMMISSIONER

November 29, 2010

Timothy S. Murphy,
Prescott Jamieson Nelson & Murphy, LLC,
P. O. Box 1190,
Saco, Maine 04072

David B. Van Slyke,
Preti Flaherty Beliveau & Pachios LLP,
P.O. Box 9546,
Portland, Maine 04101

RE: Berwick Iron & Metal Recycling,
Air Emission License A-1041-71-A-N

Dear Mr. Murphy and Mr. Van Slyke:

I am writing in response to Mr. Murphy's correspondence of October 19, 2010 and November 12, 2010, regarding Berwick Iron & Metal Recycling, Inc. (Berwick) and also Mr. Van Slyke, at Mr. Murphy's request. We did receive a Notice of Appeal and Request for Public Hearing on the above license from Mr. Van Slyke on November 26, 2010.

06-096 CMR 2:

The use of the word "may" in 06-096 CMR 2, 11(C) does not impose a mandatory requirement that all applications be received before an application to the Bureau of Air Quality (BAQ) is accepted as complete for processing in all instances. Instead this provision merely allows the Commissioner, in his or her discretion and on a case by case basis, to impose that requirement. The Commissioner imposed no such requirement as to Berwick's application to the Bureau of Air Quality ("BAQ"). The BAQ typically receives and processes several hundred applications per year with full knowledge that licenses from other DEP programs may be required. The provision you refer to in 06-096 CMR 2 is rarely invoked and generally only in those applications of statewide significance such as liquefied natural gas receiving facilities. Berwick's application did not rise to that level of significance.

Notice to Public regarding Application for Air Emission License:

We agree that, due to an oversight, the Commissioner did not notify the Board of Environmental Protection that Berwick's application was accepted as complete for processing pursuant to 38

MRSA § 344(1). However, it does not appear that the failure to do that in this case deprived the public of any rights regarding participation or otherwise aggrieved any party. Berwick did publish the required public notice that it was filing an application with the BAQ in the Foster's Daily Democrat on June 17, 2010 to inform residents of the Berwick area that the application was being submitted. Further, a copy of the application was filed with the Berwick Town Office for public inspection on or about June 16, 2010 and was filed with the DEP on June 21, 2010. These actions provided the general public with the opportunity to become informed about the nature of the application as well as the opportunity to request a public hearing.

BACT Analysis and Operating Limits

In its application, Berwick submitted a BACT analysis. Upon review of that analysis staff requested that Berwick submit supplemental BACT information addressing certain questions about the analysis. BACT control requirements for engines of this size and type are based on a review of the EPA RACT/BACT/LAER Clearinghouse as well as previous BAQ licensing decisions on similar units. Our review of the BACT analysis, the EPA Clearinghouse and past licensing decisions determined that additional pollution control equipment was not required.

Operational limits for diesel engines of this type are usually expressed as tons of pollutant per year, gallons of fuel use per year, hours of operation per year and mass and/or concentration of a pollutant passing thru the stack. The license allows the crusher to burn up to 150,000 gallons of ultra low sulfur diesel per year. The firing rate of the unit (gallons per hour) in combination with the yearly fuel use limit roughly equates to 2000 hours per year of operation. The fuel cap and hours of operation keep the facility below major source thresholds, and it is therefore considered a synthetic minor facility. The BAQ does not require daily, weekly or monthly hours of operation for diesel units as those limits are best decided by the local planning board, and are not an efficient means of regulating air quality.

Fuel Inventory Tracking:

The Air Emission License issued to Berwick concerns the crusher and diesel drive; mobile equipment is not addressed. As noted above, the annual fuel use and hours of operation limits on the diesel unit are interchangeable and both are enforceable by EPA and DEP. BAQ compliance staff routinely review fuel use records and hours of operation. Exceeding these limits may alter the status of the facility as a synthetic minor resulting in an enforcement action and associated penalties.

40 CFR 60, Subpart ZZZZ:

The provisions of 40 CFR 63, Subpart ZZZZ become effective for existing engines on May 3, 2013, thus the requirement that Berwick submit a compliance plan before April 30, 2013. New EPA rules usually provide a three year window for existing facilities, in this case the diesel unit, to come into compliance with new requirements.

Ambient Air Quality Analysis:

Regarding additional ambient air quality analysis, Berwick is limited to 20 tons per year of NOx emissions, an amount considerably less than the 100 tons per year threshold for additional analysis or modeling as required in 06-096 CMR 115. No additional analysis is required as the facility is below the thresholds.

Special Conditions 16(B) and 20:

With respect to the purported inconsistency between Special Conditions 16(B) and (20), Special condition 16(B) establishes the fuel limit, in gallons per calendar year of diesel fuel, and the method of demonstrating compliance with this limit, as the fuel is presently stored and used in the Diesel Drive.

Special condition (20) allows Berwick to construct, at some time in the future, should it desire to do so, a common fuel storage tank to service both the diesel unit and the source's mobile equipment. The meter to be installed on the fuel line to the Diesel Drive will record the fuel delivered to that unit. It will be necessary for Berwick to maintain records from the supplier showing quantity, type of fuel delivered and the sulfur content of the fuel.

Therefore, these two special conditions are not inconsistent.

Signed Licenses:

At the present time, copies of signed licenses are accumulated, and posted to the website approximately once a month. As a result of your comments, this procedure is now being revised; signed copies will be posted every two weeks or more frequently if volume is sufficiently large to warrant more frequent posting.

Should you have any questions please contact me at 287-7048. I will be calling Mr. Van Slyke soon to discuss the content of this letter.

Regards;

Bryce J. Sproul

Bryce J. Sproul, Director
Division of Licensing and Enforcement
Bureau of Air Quality

Cc: Lynn Cornfield, BAQ
James Brooks, BAQ
Jerry Reid, Office of Attorney General